State of Illinois
ENVIRONMENTAL PROTECTION AGENCY

USEPA

Mary A. Gade, Director
217/524-3300

2200 Churchill Road, Springfield, IL 62794-9276

July 14, 1993

LONZA, Inc.
Attn: Mr. Ron Cloat
Post Office Box 105
Mapleton, Illinois 61547

Re: 1438050005 -- Peoria County
LONZA, Inc.
ILD001643659
Log No. C-701
Received: April 15, 1993
RCRA - Closure

Dear Mr. Cloat:

This letter is in response to the document entitled "Wastewater Lagoon Closure Plan/Site Evaluation for LONZA", prepared by Environmental Science & Engineering, Inc. and submitted by LONZA Inc. (LONZA). This document was dated April 15, 1993 and was received by the Agency on April 15, 1993. The closure plan for the hazardous waste surface impoundment treatment unit (T02) at the above referenced facility is hereby approved subject to the following conditions and modifications:

1. When closure is complete the owner or operator must submit to the Agency certification both by the owner or operator and by an independent registered professional engineer that the facility has been closed in accordance with the specifications in the approved closure plan. This certification must be received at this Agency within sixty (60) days after closure.

   The attached closure certification form must be used. Signatures must meet the requirements of 35 Ill. Adm. Code Section 702.126. The independent engineer should be present at all critical, major points (activities) during the closure. These might include soil sampling, soil removal, backfilling, final cover placement, etc. The frequency of inspections by the independent engineer must be sufficient to determine the adequacy of each critical activity.

   The Illinois Professional Engineering Act (Ill. Rev. Stat., Ch. 111, par. 5101 et. seq.) requires that any person who practices professional engineering in the State of Illinois or implies that he (she) is a professional engineer must be registered under the Illinois Professional Engineering Act (par. 5101, Sec. 1). Therefore, any certification or engineering services which are performed for a closure plan in the State of

Illinois must be done by an Illinois P.E.

Plans and specifications, designs, drawings, reports, and other documents rendered as professional engineering services, and revisions of the above must be sealed and signed by a professional engineer in accordance with par. 5119, sec. 13.1 of the Illinois Professional Engineering Act.

As part of the closure certification, to document the closure activities at your facility, please submit a Closure Documentation Report which includes:

a. The volume of waste, waste residue, and contaminated soil (if any) removed. The term waste includes wastes resulting from decontamination activities.

b. Scaled drawings showing the horizontal and vertical boundaries from which contaminated soil was removed.

c. A description of the method of waste handling and transport.

d. The waste manifest numbers.

e. Copies of the waste manifests.

f. A chronological summary of closure activities and the cost involved.

g. A description of the sampling and analytical methods used including sample preservation methods and chain-of-custody information.

h. Color photo-documentation of closure. Document conditions before, during, and after closure.

i. Tests performed, methods and results.

j. Information documenting the results of all required soil sampling/analysis efforts. The goal of this presentation should be to present, in a logical manner, the activities and results associated with the sampling/analysis effort. At a minimum, such a presentation should contain:

    1. Identification of the reason for the sampling/analysis effort and the goals of the effort.

    2. A summary of the analytical data, including tables and all QA/QC data associated with the sampling/analysis effort.

    3. A scaled drawing showing the horizontal and vertical location where all soil samples were collected.

4. A description of the soil sampling procedures, sample preservation procedures and chain of custody procedures.

5. Identification of the test methods used and detection limits achieved, including identification of any sample preparation techniques utilized, dilutions made and interferences encountered during the analysis.

6. A description of all quality assurance/quality control procedures implemented and the results of these efforts.

7. Copies of the laboratory report sheets, including results of the analysis conducted on QA/QC samples.

8. Visual classification of each soil sample in accordance with ASTM D-2488.

9. A discussion of the data, as it relates to the overall goal of the sampling/analysis effort.

The original and two (2) copies of all certifications, logs, or reports which are required to be submitted to the Agency by the facility should be mailed to the following address:

Illinois Environmental Protection Agency
Division of Land Pollution Control -- #33
Permit Section
2200 Churchill Road
Post Office Box 19276
Springfield, Illinois 62794-9276

2. Contrary to the statement made in Section 5.3.1, "Aquifer Classification" of the above referenced document, it appears as though the groundwater present in the uppermost aquifer at the subject facility is subject to the Class I groundwater standards since it appears to meet the definition of Class I Potable Resource Groundwater as defined by 35 IAC 620.210. Section 5.3 of the subject submittal presented information indicating why the groundwater should be subject to Class II groundwater standards. Agency comments on the information provided is as follows:

a. The definition of Class I Potable Resource Groundwater is presented in 35 IAC 620.210. It must be noted that Class I groundwater is groundwater which: (1) is 10' or more below the land surface; and (2) meets any of the four criteria identified in 35 IAC 620.210(a)(1) thru 35 IAC 620.210(a)(4).

b. Section 5.3.1, "Groundwater Located 10 feet or More Below the Land Surface (620.210,a)", states in part

"...The depth to groundwater at the LONZA facility is generally less than 10 feet, and therefore does not consistently meet the definition of Class I Potable Resource Groundwater...". It must be noted that the Board Note at the end of 35 IAC 620.210 states: "Any portion of the thickness associated with the geologic materials as described in subsections 620.210(a)(2), 620.210(a)(3) or 620.210(a)(4) should be designated as Class I: Potable Groundwater if located 10 feet or more below the land surface." (emphasis added). Thus, any groundwater 10' or more below the land surface which meets any of the four criteria in 35 IAC 620.210(a)(4) would be "Class I" groundwater.

c. Section 5.3.1, "Thickness of the Unconsolidated Sand and Gravel (620.210,a,2)" states, in part, "...The thickness of the unconsolidated sand and gravel does appear to meet the minimum requirement described in 620.210,a,2." Thus, this would indicate that the groundwater in the geologic unit in question would be subject the Class I groundwater quality standards.

d. Section 5.3.1, "Sandstone and/or Fractured Carbonate (620.210,a,3)" states, in part "...The thickness of the sandstone [present at a depth ranging from 16.5' to 19.25' below the ground surface] is less than 10 feet and therefore does not met the definition of Class I Potable Resource Groundwater...". However, no information was provided to support this statement since the referenced borings apparently only extended to approximately 20', not to bedrock.

e. Section 5.3.1, "Sustained Yield (620.210,a,4,A)" states, in part "...The sustained yield does appear to meet the minimum requirement as described in 620.210,a,4,A." Thus, this would indicate that the groundwater in the geologic unit in question would be subject to the Class I groundwater quality standards.

f. Section 5.3.1, "Hydraulic Conductivity (620.210,a,4,B)" states, in part, "...The hydraulic conductivity does appear to meet the minimum requirement as described in 620.210,a,4,B." Thus, this would indicate that the groundwater in the geologic unit in question would be subject to the Class I groundwater quality standards.

3. The groundwater classification issue is further discussed in Section 5.3.1 regarding potability of the groundwater and its ultimate discharge to Pond Lily Lake and/or the Illinois River. However, this type of information has no bearing on the classification of groundwater as set forth in 35 IAC 620, Subpart B, "Groundwater Classification". It may be of importance if LONZA desires to reclassify the groundwater following the procedures set forth in 35 IAC 620.260.

4. The last part of Section 5.3.1 makes a statement that groundwater background levels are not consistent with Class I groundwater quality standards and may be indicative of a regional shallow groundwater quality that is consistent with Class II standards. It appears then that this statement is also used to support the position that the groundwater beneath the facility should be subject only to the Class II standards of 35 IAC 620. This statement has no real impact on whether groundwater is Class 1 or Class 2, as the quality of the groundwater does not enter into the definitions set forth in 25 IAC 620.201 and 620.210. It should be noted that the Class I groundwater standards set forth in 35 IAC 620.410 state that the standards apply, except when natural causes produce exceedence of the standard.

   If LONZA desires to demonstrate that the groundwater background values for certain parameters are above the Class I standards (i.e. present due to natural causes), then a minimum of four quarters of groundwater monitoring would need to be conducted and a statistical evaluation of the upgradient wells with the downgradient wells would need to be conducted in order to demonstrate that the subject surface impoundment has not detrimentally affected the quality of the groundwater.

5. The groundwater monitoring program described in the subject submittal is hereby approved subject to the following conditions and modifications:

   a. Under 35 IAC 620.250, a groundwater management zone (GMZ) may be established for a three-dimensional region containing groundwater being managed to mitigate impairment caused by the release of contaminants for a site: (1) that is subject to a corrective action process approved by the Agency; or (2) for which the owner or operator undertakes an adequate corrective action in a timely manner.

      For a GMZ to be established, the groundwater within the proposed GMZ must be managed to mitigate impairment caused by the release of contaminants from the site. The groundwater management measures, whatever they are, need to be direct measures which contain and remediate groundwater contamination. Therefore it would be improper to submit an application for the establishment of a GMZ (as proposed in Section 7.0, "Closure Plan Addendum Submission" before (1) the extent of the groundwater contamination (if any) is determined, and (2) the need of a GMZ has been determined.

   b. In addition to the field parameters of pH and specific conductance, the temperature of the groundwater must be determined in the field.

c. While groundwater monitoring continues on a quarterly basis the following schedule should be followed:

Sampling Event of Calendar Year	Samples to be Collected During the Month of	Result Submitted to the Agency by the Following
First Quarter	January-February	April 15
Second Quarter	April-May	July 15
Third Quarter	July-August	October 15
Fourth Quarter	October-November	January 15

d. Groundwater resulting from developing or purging a groundwater monitoring well must be containerized and properly disposed.

6. Based on a review of available information, it appears as though all soil and groundwater which remains in the vicinity of the treatment impoundment should meet the following soil and groundwater cleanup objectives

Groundwater Cleanup Objectives and Standards

Parameter	CUO (mg/l)	ADL
2-Butanone	4.2	
2-Hexanone	ND	0.05
Acetone	0.7	
Benzene	0.005	
Toluene	1.0	
Bis(2-ethylhexyl) phthalate (Note 1)	0.006	
Di-n-Octyl Phthalate	0.14	
Butyl-Benzyl-Phthalate	1.4	
N-Nitrosopyrrolidine (Note 1)	0.04	0.04
2-Methyl-Phenol	0.35	
Arsenic	0.05	
Barium	2.0	
Beryllium	0.004	
Cadmium	0.005	
Chromium	0.1	
Cobalt	1.0	
Copper	0.65	
Lead	0.0075	
Mercury	0.002	
Nickel	0.1	
Selenium	0.05	
Vanadium	0.049	
Zinc	5.0	
Silver	0.05	
Sulfide (total)	ND	1.0
Tin	4.2	
Carbon Disulfide	0.7	

Soil Cleanup Objectives

Parameter	CUO (mg/kg)	ADL
2-Butanone	4.2	
2-Hexanone	ND	0.05
Acetone	0.7	
Benzene	0.005	
Toluene	1.0	
Bis(2-ethylhexyl) phthalate (Note 1)	0.12	0.66
Di-n-Octyl Phthalate	2.8	
Butyl-Benzyl-Phthalate	28.0	
N-Nitrosopyrrolidine (Note 1)	0.04	0.04
2-Methyl-Phenol	0.35	
Arsenic (TCLP)	0.05 mg/l	
Barium (TCLP)	2.0 mg/l	
Beryllium (TCLP)	0.004 mg/l	
Cadmium (TCLP)	0.005 mg/l	
Chromium (TCLP)	0.1 mg/l	
Cobalt (TCLP)	1.0 mg/l	
Copper (TCLP)	0.65 mg/l	
Lead (TCLP)	0.0075 mg/l	
Mercury (TCLP)	0.002 mg/l	
Nickel (TCLP)	0.1 mg/l	
Selenium (TCLP)	0.05 mg/l	
Vanadium (TCLP)	0.049 mg/l	
Zinc (TCLP)	5.0 mg/l	
Silver (TCLP)	0.05 mg/l	
Tin (TCLP)	4.2 mg/l	
Sulfide (total)	ND	
Carbon Disulfide	0.7	

Notes:

Note 1: In addition to meeting the individual Class I groundwater recommendations indicated in the tables above, the following equation must be satisfied in order to protect against liver tumors:

$$\frac{[\text{bis(2-ethylhexyl)phthalate}]}{0.006\ \text{mg/l}} + \frac{[\text{n-nitrosopyrrolidine}]}{0.04\ \text{mg/l}} \leq 1.0$$

TCLP: Toxicity Characteristic Leaching Procedure (Method 1311 of SW-846)

ADL: Acceptable Detection Limits have been set by the Agency to aid in the evaluation of residual soil contamination for those substances where health or environmentally based cleanup objectives are below commonly attainable detection limits. The stated cleanup objectives remain the goal; however the Agency will accept analyses as proof of acceptable cleanup if these analyses (1) do not detect the parameter of concern, (2) have a detection limit which is at or below the ADL for that parameter, and (3) were conducted in accordance with the quality assurance criteria set forth in SW-846.

7. The soil and groundwater cleanup objectives (CUOs) set forth in Condition 6 above may be revised if LONZA provides sufficient information demonstrating that alternative values will meet the requirements of 35 IAC 620, 725.211, 725.214, and 725.328(a). Final Agency action on any alternative CUOs proposed by LONZA will be subject to the appeal provisions set forth in Sections 39 and 40 of the Illinois Environmental Protection Act.

8. A sufficient number of additional soil samples should be collected and analyzed to clearly determine the horizontal and vertical limits of the soil which exceeds the established cleanup objectives in and around the hazardous waste treatment impoundment undergoing RCRA closure. The procedures used to collect and analyze these samples must be in accordance with those approved by this letter. The procedures used for determining the horizontal and vertical locations from which these samples must be collected shall be in accordance with Sections 13.a and 13.b of the Agency's RCRA closure plan instructions. However, no random sampling shall be used to make this determination.

   a. Samples need only be analyzed for those constituents which exceed the cleanup objectives in the vicinity of the additional sample locations.

   b. Where the cleanup objectives in Condition 6 exceeds the ADL, then the required detection limit must meet the ADL for that compound.

   c. Contamination will be assumed to extend to the first clean sample in a given direction.

   d. Although total metals analysis may be useful in determining the suspected extent of soil contamination, only soil samples which have been analyzed utilizing SW-846 Method 1311 (TCLP) analysis will be used in determining the extent of any metals contamination. Note that total metals analysis may be useful if LONZA desires to collect background soil samples.

9. The following procedures must be utilized in the collection of all required soil samples:

   a. All soil encountered during the sampling effort must be classified in accordance with ASTM Method D-2488.

   b. If a drill rig or a similar piece of equipment is necessary to collect the required soil samples, then:

      1. The procedures specified in ASTM Method D-1586 (Split Spoon Sampling) or D-1587 (Shelby Tube Sampling) must be used in collecting the samples;

2. Soil samples must be collected continuously at several locations to provide information regarding the shallow geology of the area where the investigation is being conducted;

3. Soil samples not collected explicitly for VOC analysis should be field-screened for the presence of VOCs;

4. All soil samples which will be analyzed for volatile organic compounds must be collected in accordance with Attachment 7 of the Agency's RCRA closure plan instructions;

5. All other soil samples must be collected in accordance with the procedures set forth in SW-846; and

6. When visually discolored or contaminated material exists within an area to be sampled, horizontal placement of sampling locations shall be adjusted to include such visually discolored and/or contaminated areas. Sample size per interval shall be minimized to prevent dilution of any contamination.

10. Quality assurance/quality control procedures which meet the requirements of SW-846 must be implemented during all required sampling/analysis efforts.

11. Collection, preservation, handling, preparation, and analysis of all required samples must be carried out in accordance with the procedures set forth in SW-846.

12. All soil samples shall be analyzed individually (i.e., no compositing). When an SW-846 (Third Edition) analytical method is specified, all the chemicals listed in the Quantitation Limits Table for that method shall be reported unless specifically exempted in writing by the Agency. Apparent visually contaminated material within a sampling interval shall be included in the sample portion of the interval to be analyzed. To demonstrate that a parameter is not present in a sample, analysis results must show a detection limit at least as low as (1) the PQL for that parameter in the Third Edition of SW-846 (Third Edition) Volume 1A, pages TWO-29 and TWO-30, Table 2-15 or (2) 50% of the cleanup objective identified in Condition 6 above.

13. All references to SW-846 in this letter refers to Test Methods For Evaluating Solid Wastes, Third Edition (SW-846).

14. Contaminated soil may be excavated and disposed off-site at any time during closure. The goal of any such effort should be to remove all soil which exceeds the established cleanup objectives.

15. If LONZA determines that soil excavation and off-site disposal is not the preferred remedial action for this closure, then the Agency must be notified in writing when such a determination is made. At that time, the Agency will provide LONZA with additional guidance regarding the information which must be submitted to the Agency for review and approval relative to the alternative remedial action which the facility would like to implement.

16. To avoid creating another regulated storage unit during closure, it is recommended that you obtain any necessary permits for waste disposal prior to initiating excavation activities. If it is necessary to store excavated hazardous waste on-site prior to off-site disposal, do so only in containers or tanks for less than ninety (90) days. Do not create regulated waste pile units by storing the excavated hazardous waste in piles. The ninety (90) day accumulation time exemption (35 IAC 722. 134) only applies to containers and tanks.

17. If removal and off-site disposal is the chosen remedial action for the soil contamination encountered at the subject container storage area, then soil samples must be collected for analysis from the bottom and sidewalls of the final excavation from which contaminated soil was removed. This sampling analysis effort is necessary to demonstrate that the remaining soil meets the established cleanup objectives.

    a. A grid system as set forth in Section 13.b of the Agency's closure plan instructions must be established over the excavation.

    b. Samples must be collected from the floor of the excavation at each grid intersection, including intersections along the perimeter of the excavation.

    c. Samples must be collected 6"-12" below the ground surface at each grid intersection around the excavation perimeter. Samples must also be collected at the midpoint of the excavation wall at each grid intersection along the excavation perimeter.

    d. Collection/analysis of all required samples must be in accordance with the procedures approved in this letter.

    e. Soil samples which must be analyzed for volatile organic compounds (VOCs) shall be collected using Attachment 7 of the Agency's RCRA closure plan instructions. In addition, such samples must be collected 6"-12" beneath the floor/sidewalls of the excavation to minimize the possibility of volatilization of the contaminants prior to the collection of the samples.

f. No random sampling shall be conducted to verify that the cleanup objectives have been met.

18. If removal and off-site disposal is the chosen remedial action for the soil contamination encountered at the subject hazardous waste treatment impoundment, then additional soil must be removed, as necessary, until it can be demonstrated that the remaining soil in and around the area of concern meets the established CUOs.

19. Under the provisions of 29 CFR 1910 (51 FR 15,654, December 19, 1986), cleanup operations must meet the applicable requirements of OSHA's Hazardous Waste Operations and Emergency Response standard. These requirements include hazard communication, medical surveillance, health and safety programs, air monitoring, decontamination and training. General site workers engaged in activities that expose or potentially expose them to hazardous substances must receive a minimum of 40 hours of safety and health training off site plus a minimum of three days of actual field experience under the direct supervision of a trained experienced supervisor. Managers and supervisors at the cleanup site must have at least an additional eight hours of specialized training on managing hazardous waste operations.

20. All references to the "Agency's RCRA closure plan instructions" refers to the document entitled Instructions for the Preparation of Closure Plans for Interim Status RCRA Hazardous Waste Facilities, December 11, 1990. A copy of this document is enclosed.

21. If the Agency determines that implementation of this closure plan fails to satisfy the requirements of 35 IAC 725.211, the Agency reserves the right to amend the closure plan. Revisions of closure plans are subject to the appeal provisions of Section 40 of the Illinois Environmental Protection Act.

22. If clean closure cannot be achieved pursuant to 35 IAC Part 725 then a modified closure plan and a post-closure plan prepared pursuant to 35 IAC Part 725 must be submitted to the Agency for review and approval within 60 days of such a determination.

23. Please be advised that the requirements of the Responsible Property Transfer Act (Public Act 85-1228) may apply to your facility due to the management of RCRA hazardous waste. In addition, please be advised that if you store or treat on-site generated hazardous waste in containers or tanks pursuant to 35 IAC 72.134, those units are subject to the closure requirements identified in 35 IAC 722.134(a)(1).

24. All hazardous wastes that result from this project are subject to annual reporting as required in 35 IAC 722.141 and shall be reported to the Agency by March 1 of the following year for wastes treated and left on-site or shipped off-site for storage, treatment, and/or disposal during any calendar year. Additional information and appropriate report forms may be obtained from the Agency by contacting:

    Facility Reporting Unit
    Bureau of Land
    Illinois Environmental Protection Agency
    2200 Churchill Road
    P.O. Box 19276
    Springfield, Illinois 62794-9276

Should you have any questions regarding this matter, please contact Michael A. Heaton or Terri Myers at 217/524-3300.

Very truly yours,

Lawrence W. Eastep, P.E., Manager
Permit Section
Division of Land Pollution Control

LWE:mah
JCM

Attachments: I. Closure Certification Statement
II. Instructions for the Preparation of Closure Plans for Interim Status RCRA Hazardous Waste Facilities (December 11, 1990)

cc: USEPA Region V -- George Hamper
Dan Gallagher -- ESE Inc.
Kevin Murphy -- Latham & Watkins
Julie Weisenberg -- OAG, Springfield

State of Illinois
ENVIRONMENTAL PROTECTION AGENCY

US EPA

Mary A. Gade, Director
217/524-3300

2200 Churchill Road, Springfield, IL 62794-9276

May 11, 1993

Vesuvius U.S.A.
Attn: Mr. Gary Novak
955 N. 5th Street
Post Office Box 336
Charleston, Illinois 61920

Re: 0290105004 -- Coles County
Vesuvius U.S.A.
ILD185338381
Log No. C-587-M-3
Received: April 9, 1993
April 13, 1993
RCRA - Closure
Subpart F

Dear Mr. Novak:

This letter is in response to the document entitled "Impoundment Soils Resampling" dated April 6, 1993 and received by the Agency on April 9, 1993 and the document entitled "February, 1993 Quarterly Groundwater Monitoring Report, Surface Impoundment Closure", dated April 7, 1993 and received by the Agency on April 13, 1993. Both of these documents were prepared by EnviroGroup Limited and were submitted by the above referenced facility. The submittal dated April 6, 1993 was reviewed as a closure plan modification request due to the fact that it contained the analytical results of soil samples collected for the purpose of clean closing the hazardous waste surface impoundment at the above-referenced facility. The closure plan for the hazardous waste surface impoundment at the above-referenced facility is hereby approved subject to the following conditions and modifications:

1. Based upon the provided soil analytical results provided in the document dated April 6, 1993, the Agency agrees with the conclusion presented by Vesuvius on page 6 of the above-referenced document that "The former impoundment did not impact soils immediately beneath or adjacent to the site as demonstrated by the presented soil sampling and analysis." Furthermore, based upon the information provided in the document dated April 7, 1993 and received by the Agency on April 13, 1993, the Agency agrees with the statement in the cover letter that "Data from this report and the previous reports indicate that groundwater has not been impacted by the former impoundment".

2. The Agency hereby finds that clean closure appears to have been achieved. In accordance with Condition 3 of

the November 18, 1992 closure plan approval letter, closure certification along with a Closure Documentation Report must be submitted to the Agency by August 1, 1993. This certification and report must be developed in accordance with Condition 3 of the November 18, 1992 closure plan approval letter.

3. 35 IAC 703.159 states, in part: "Owners and operators of surface impoundments, land treatment units, and waste piles closing by removal or decontamination under 35 ILL. Adm. Code 725 standards must obtain a post-closure permit unless they demonstrate to the Agency that the closure met the standards for closure by removal or decontamination in 35 IAC 724.328, 724.380(e), or 724.358, respectively. A demonstration may be made in the following ways:

   a. ...

   b. If the owner or operator has not submitted a Part B application for a post-closure permit, the owner or operator may petition the Agency for a determination that a post-closure permit is not required because the closure met the applicable 35 IAC 724 standards.

      1. The petition must include data demonstration that closure by removal or decontamination standards were met.

      2. The Agency shall approve or deny the petition according to the procedures outlined in Section 703.160."

   Since Vesuvius U.S.A. has not submitted a Part B application for a post-closure permit, the facility must either:

   a. Submit a post-closure permit application in accordance with 35 IAC Part 725 Subpart G; or

   b. Petition the Agency for a determination that a post-closure permit is not required because the closure met the applicable 35 IAC Part 724 standards.

4. The Agency recognizes that the contents of the Closure Certification required by Condition 2 above and the contents of the petition as stated in Condition 3 above would contain nearly identical information. Therefore, if Vesuvius so desires, then the petition as stated in Condition 3 above may be contained in the cover letter to be attached to the Closure Certification as required by Condition 2 above. This petition, if Vesuvius elects to submit it, should include the following information:

   a. A statement clearly indicating that Vesuvius is petitioning the Agency for a determination that a post-closure permit is not required because the

closure met the applicable 35 IAC Part 724 standards per 35 IAC 703.159(b); and

b. A statement that the Closure Certification, as required by Condition 2 above, satisfies the requirements of 35 IAC 724.328(a)(1) (subject to Agency approval), therefore demonstrating that the closure has met the standards for closure by removal or decontamination thus satisfying 35 IAC 703.159(b)(2).

5. Additional guidance will be provided by the Agency if Vesuvius determines that a Part B post-closure permit is the desired course of action.

6. Toluene, ethylbenzene, and xylenes have been detected in the upgradient well. Also, contrary to previous sampling events, low concentrations of toluene and total xylenes were detected in downgradient wells MW-07 and the duplicate sample for MW-08. Since the upgradient well, MW-05, is immediately adjacent to the property line and has consistently detected contaminants for three quarters above 35 IAC 620.410 Class I groundwater quality standards it is reasonable to conclude that these contaminants may be originating upgradient of the facility. Therefore, documentation that the property owner hydrologically upgradient has been notified by the facility that toluene, ethylbenzene, and xylene may be originating from their property shall be included in the closure certification required by Condition 2 above.

7. Except as modified above, RCRA closure of the subject hazardous waste surface impoundment shall be carried out in accordance with the Agency's November 18, 1992 closure plan approval letter.

Should you have any questions regarding this matter, please contact Michael A. Heaton or Heather K. Young of my staff at (217) 524-3300.

Very truly yours,

Lawrence W. Eastep, P.E., Manager
Permit Section
Division of Land Pollution Control
Bureau of Land

LWE:mah

cc: Phillip E. Stark, P.E. -- EnviroGroup Limited
USEPA Region V -- George Hamper

B-113

Bob Fuhrer
USEPA - Region V

DETREX CORPORATION

P.O. Box 5111, Southfield, MI 48086-5111
FAX: (313) 358-5803
TELEPHONE: (313) 358-5800

September 20, 1991

Mr. Lawrence W. Eastep, P.E.
Manager, Permit Section
Division of Land Pollution Control - #24
Illinois EPA
220 Churchill Road
Springfield, IL 62794

RE: Detrex Corporation
2537 LeMoyne Ave.
Melrose Park, IL 60160
ILD 074 427 938
Prior Conduct Certification

Dear Mr. Eastep,

Detrex Corporation forwarded to you on Tuesday September 18, 1991 the Prior Conduct Certifications for the above facility. We inadvertently left our the Attachment for #I "Other Sites" showing our facilities. Enclosed are the copies of this list.

It would be appreciated if this could be attached to the following Prior Conduct Certifications.

F. J. Chmielnicki
C. B. Stockmeyer, Jr.
M. Tepatti
I. H. Shamiyeh
William M. Moore, Jr.

We appreciate your understanding in this matter.

Sincerely,

William M. Moore, Jr.
Corporate Manager,
Environmental Compliance,
RCRA Section

cc: Amy Dragavich-IDEM

RECEIVED
SEP 23 1991
IEPA-DLPC

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Detrex Corporation - Solvents Division
3114 Cullman Ave.
Charlotte, NC 28206

Detrex Corporation - Solvents Division
2537 LeMoyne Ave.
Melrose Park, IL 60160

Detrex Corporation - Solvents Division
1410 Chardon Rd.
Euclid, OH 44117

Detrex Corporation - Solvents Division
322 International Parkway
Arlington, TX 76011

Detrex Corporation - Solvents Division
12886 Eaton Ave.
Detroit, MI 48227

Detrex Corporation - Solvents Division
312 Ellsworth Ave.
Grand Rapids, MI 49503

Detrex Corporation - Solvents Division
2263 Distributors Drive
Indianapolis, IN 46241

Detrex Corporation - Solvents Division
3027 Fruitland Ave.
Los Angles, CA 90058

Detrex Corporation - Solvents Division
835 Industrial Highway, Unit No. 1
Cinnaminson, NJ 08077

Detrex Corporation - Solvents Division
3114 Cullman Ave.
Charlotte, NC 28206

Detrex Corporation - Solvents Division
2537 LeMoyne Ave.
Melrose Park, IL 60160

Detrex Corporation - Solvents Division
1410 Chardon Rd.
Euclid, OH 44117

Detrex Corporation - Solvents Division
322 International Parkway
Arlington, TX 76011

Detrex Corporation - Solvents Division
12886 Eaton Ave.
Detroit, MI 48227

Detrex Corporation - Solvents Division
312 Ellsworth Ave.
Grand Rapids, MI 49503

Detrex Corporation - Solvents Division
2263 Distributors Drive
Indianapolis, IN 46241

Detrex Corporation - Solvents Division
3027 Fruitland Ave.
Los Angles, CA 90058

Detrex Corporation - Solvents Division
835 Industrial Highway, Unit No. 1
Cinnaminson, NJ 08077

Detrex Corporation - Solvents Division
3114 Cullman Ave.
Charlotte, NC 28206

Detrex Corporation - Solvents Division
2537 LeMoyne Ave.
Melrose Park, IL 60160

Detrex Corporation - Solvents Division
1410 Chardon Rd.
Euclid, OH 44117

Detrex Corporation - Solvents Division
322 International Parkway
Arlington, TX 76011

Detrex Corporation - Solvents Division
12886 Eaton Ave.
Detroit, MI 48227

Detrex Corporation - Solvents Division
312 Ellsworth Ave.
Grand Rapids, MI 49503

Detrex Corporation - Solvents Division
2263 Distributors Drive
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DETREX CORPORATION

P.O. Box 5111, Southfield, MI 48086-5111

TWX 810-224-4756

TELEPHONE:
(313)358-5800

March 31, 1989

Michigan Department of Natural Resources
Hazardous Waste Division
P. O. Box 30028
Lansing, MI 48909

I am the chief financial officer of Detrex Corporation, P. O. Box 5111, Southfield, MI 48086. This letter is in support of the use of the financial test to demonstrate financial responsibility for liability coverage and closure, as specified in Part 7 of the Act 64 Administrative Rules.

1. This firm is the owner or operator of the following facilities for which liability coverage is being demonstrated through the financial test specified in Subpart H of 40 CFR 264:

Region	Facility	EPA Identification
I	Gold Shield Division 260 Chapel Road So. Windsor, CT 06074	CTD 01 016 8870
II	Gold Shield Division 835 Industrial Highway Unit No. 1 Cinnaminson, NJ 08077	NJD 04 731 8043
IV	Gold Shield Division P. O. Box 5274 Charlotte, NC 28225	NCD 04 977 3245
V	Gold Shield Division 12886 Eaton Avenue Detroit, MI 48227	MID 09 160 5972
V	Gold Shield Division 312 Ellsworth Avenue, S.W. Grand Rapids, MI 49503	MID 02 090 6764
V	Gold Shield Division 1410 Chardon Road Euclid, OH 44117	OHD 08 015 8702

Region	Facility	EPA Identification
V	Gold Shield Division 2537 LeMoyne Avenue Melrose Park, IL 60160	ILD 07 442 4938
V	Gold Shield Division 2263 Distributors Drive Indianapolis, IN 46241	IND 08 561 6837
V	General Chemicals Division North State Road Ashtabula, OH 44004	OHD 00 416 5924
VI	Gold Shield Division 322 International Parkway Arlington, TX 76011	TXD 98 062 6154
IX	Gold Shield Division 3027 Fruitland Avenue Los Angeles, CA 90058	CAD 02 016 1642

2. This firm owns or operates the following facilities for which financial assurance for closure is demonstrated through the financial test specified in Part 7 of the Act 64 Administrative Rules. The current closure cost estimates covered by the test are shown for each facility:

Region	Facility	EPA Identification	Closure Cost
I	Gold Shield Division 260 Chapel Road So. Windsor, CT 06074	CTD 01 016 8870	$ 23,595
II	Gold Shield Division 835 Industrial Highway Unit No. 1 Cinnaminson, NJ 08077	NJD 04 731 8043	Via Trust Fund
IV	Gold Shield Division P. O. Box 5274 Charlotte, NC 28225	NCD 04977 3245	30,748
V	Gold Shield Division 12886 Eaton Avenue Detroit, MI 48227	MID 09 160 5972	17,335
V	Gold Shield Division 312 Ellsworth Avenue, S.W. Grand Rapids, MI 49503	MID 02 090 6764	11,322
V	Gold Shield Division 1410 Chardon Road Euclid, OH 44117	OHD 08 015 8702	22,120

Region	Facility	EPA Identification	Closure Cost
V	Gold Shield Division 2537 LeMoyne Avenue Melrose Park, IL 60160	ILD 07 442 4938	$ 36,775
V	Gold Shield Division 2263 Distributors Drive Indianapolis, IN 46241	IND 08 561 6837	58,602
V	General Chemicals Division North State Road Ashtabula, OH 44004	OHD 00 416 5924	42,800
VI	Gold Shield Division 322 International Parkway Arlington, TX 76011	TXD 98 062 6154	176,951
IX	Gold Shield Division 3027 Fruitland Avenue Los Angeles, CA 9005	CAD 02 016 1642	37,846
			$458,094

3. This firm guarantees, through the corporate guarantee specified in Part 7 of the Act 64 Administrative Rules, the closure and post-closure care of the following facilities owned or operated by its subsidiaries. The current cost estimates for the closure or post-closure care so guaranteed are shown for each facility: None.

4. In states where EPA is not administering the financial requirements of Subpart H of 40 CFR Parts 264, this owner or operator is demonstrating financial assurance for the closure or post-closure care of the following facilities through the use of a test equivalent or substantially equivalent to the financial test specified in Subpart H of 40 CFR Parts 264. The current closure and/or post-closure cost estimates covered by such a test are shown for each facility: as noted above.

5. In states where EPA is administering the financial requirements of Subpart H of 40 CFR Part 264, this firm, as owner or operator or guarantor, is demonstrating financial assurance for the closure or post-closure care of the following facilities through the use of the financial test specified in Subpart H of 40 CFR Part 264. The closure and/or post-closure cost estimates covered by this test are shown for each facility: As noted above.

6. This firm is the owner or operator of the following hazardous waste management facilities for which financial assurance for closure or, if disposal facility, post-closure care, is not demonstrated either to EPA or a State through the financial test or any other financial assurance mechanism specified in Subpart H of 40 CFR Parts 264 or equivalent or substantially equivalent State mechanisms. The current closure and/or post-closure cost estimates are not covered by such financial assurance are shown for each facility: None.

This firm is required to file a Form 10K with the Securities and Exchange Commission (SEC) for the latest fiscal year.

The fiscal year of this firm ends on December 31. The figures for the following items marked with a asterisk are derived from this firm's independently audited, year-end financial statements for the latest completed fiscal year, ended 1988.

1.	Sum of current closure cost estimates (total of all cost estimates listed above)	$ 458,094
2.	Amount of annual aggregate liability coverage to be demonstrated	2,000,000
3.	Sum of lines 1 and 2	2,458,094
*4.	Total liabilities (if any portion of the closure cost estimates is included in total liabilities, you may deduct the amount of that portion from this line and add that amount to lines 5 and 6)	20,776,339
*5.	Tangible net worth	41,659,274
*6.	Net worth	42,364,170
*7.	Current assets	39,268,032
*8.	Current liabilities	12,248,458
*9.	Net working capital (line 7 minus line 8)	27,019,574
*10.	The sum of net income plus depreciation, depletion and amortization	6,359,288
*11.	Total assets in U.S. (required only if less than 90% of firm's assets are located in the U.S.)	N/A
*12.	Total assets in Michigan, excluding the value of land used for hazardous waste disposal	44,510,852

		Yes	No
13.	Is line 5 at least $10 million?	X	
14.	Is line 5 at least 6 times line 3?	X	
15.	Is line 9 at least 6 times line 3?	X	

		Yes	No
*16.	Are at least 90% of firm's assets located in the U.S.? If not, complete line 17	X	
17.	Is line 11 at least 6 times line 1?	N/A	
18.	Is line 4 divided by line 6 less than 2.0?	X	
19.	Is line 10 divided by line 4 greater than 0.1?	X	
20.	Is line 7 divided by line 8 greater than 1.5?	X	
*21.	Is line 12 at least $50 million?		X
22.	Is line 12 at least 6 times line 1?	X	

I hereby certify that the wording of this letter is identical to the wording in the model letter specified by the Director for the financial test related to closure/post-closure care as well as liability insurance coverage, as such letter was specified on the date shown immediately below.

Very truly yours,

C. B. Stockmeyer, Jr.
Vice President & Treasurer

March 31, 1989

/smb